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Serial No. 09/542,042 SEC.701

Technology Center 2600 Response dated November 12, 2004



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent application of

Jae-yoon SIM et al.

Group Art Unit 2631

Serial No. 09/542,042

Examiner Pankaj Kumar

Filed March 31, 2000

HIGH FREQUENCY EQUALIZER USING DEMULTIPLEXING TECHNIQUE AND RELATED SEMICONDUCTOR DEVICE

REQUEST FOR RECONSIDERATION

U.S. Patent and Trademark Office 2011 South Clark Place Customer Window, Mail Stop Amendment Crystal Plaza Two, Lobby, Room 1B03 Arlington, VA 22202

Sir:

This is in response to the Office action of August 25, 2004.

Allowable Claims

Applicants acknowledge with thanks the indicated allowability of Claims 1-10 and 13-22.

35 U.S.C. ¶103

Claims 11 and 12 were rejected under 35 U.S.C. ¶103 as being obvious over Workman (US 4181822) in view of Dodds (US 5841841) for the reasons stated at

pages 2-4 of the Office Action. However, Applicants respectfully contend that Claims 11 and 12 are not obvious over the teachings of Workman and Dodds, and in view of the following representations, reconsideration of the rejection under 35 U.S.C. ¶103 is requested.

In the Office Action, the Examiner states:

"Workman does not teach restoring lost high frequency components. Dodds teaches restoring lost high frequency components with an equalizer (Dodds col. 10 lines 57-62). It would have been obvious to ... modify Workman with the teachings of Dodds by putting Dodds fig. 4 between elements 72 and 75" in fig. 5 of Workman if the multiplexer was far from the demultiplexer." (Emphasis added.)

Respectfully, the Examiner's proposed modification of Workman is <u>not</u> <u>technically feasible</u>, and accordingly, Applicants contend that one of ordinary skill would not modify Workman in the manner suggested by the Examiner.

Fig. 5 of Dodds depicts <u>analog</u> transmission circuitry between a common telephone/data line and a LAN interface card. Dodds teaches that the shape of the <u>analog</u> pulse signal can be restored by use of the equalizer amplifier 60.

In contrast, the output of element 72 of Workman referred to by the Examiner is a <u>digital output</u>. Note that the upstream location of the A/D converter, and further note that element 72 denotes a <u>channel memory</u> having a digital output driven by a local oscillator 74. It manifestly would not be obvious to insert the equalizing amplifier of Dodds into a digital circuit. It particularly would not be obvious to insert the equalizing amplifier of Dodds between the channel memory 72 of Workman and

the MUX 109 of Workman. In fact, it is highly doubtful that such an arrangement would even be functional.

Applicants do not at all acquiesce to the reasoning contained in the remainder of the Office Action. However, since the proposed modification of Workman is technically unsound, Applicants respectfully traverse the rejection on that ground alone.

Conclusion

No other issues remaining, reconsideration and favorable action upon all of the Claims 1-22 now pending in the application are requested.

Respectfully submitted,

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By:

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Date: November 12, 2004

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